

II. CLAIM AMENDMENTS

1. - 18. (Cancelled)

19. (New) A method for allocating radio resources in a packet-switched data transmission system, in which system a terminal is capable of communicating with a network over a radio interface by using packet transfer mode, wherein the method comprises:

generating a radio resource request for allocating a radio resource to the terminal for packet-switched communication;

sending the radio resource request from the terminal to the network, wherein

the radio resource request comprises an express indication on whether the radio resource is requested for a real-time service, and wherein

the radio resource request is implemented by a protocol layer which defines procedures that enable radio resources to be allocated and divided among multiple users.

20. (New) A method according to claim 19, wherein said radio resource request is sent in a message comprising a bit pattern for identifying said radio resource request as a radio resource request for packet-switched implementation of a real-time service.

21. (New) A method according to claim 19, wherein said protocol layer is a radio link control/medium access control layer.

22. (New) A method according to claim 19, wherein sending said radio resource request comprises sending a packet channel request of a general packet radio service system.

23. (New) A method according to claim 22, wherein said packet channel request is:

8 bits long and comprises a bit pattern 01101 for identifying the request as a radio resource request for packet-switched implementation of a real-time service; or

11 bits long and comprises a bit pattern 110101 for identifying the request as a radio resource request for packet-switched implementation of a real-time service.

24. (New) A method for allocating radio resources in a packet-switched data transmission system in two phases, in which system a terminal is capable of communicating with a network over a radio interface by using packet transfer mode, wherein the method comprises:

generating and sending from the terminal to the network a first radio resource request for allocating a radio resource for transmission of a second radio resource request;

generating and sending from the terminal to the network, after the network allocates the requested radio resource, the second radio resource request for allocating a radio resource to the terminal for packet-switched communication, wherein

the second radio resource request comprises an express indication on whether the radio resource is requested for a real-time service, and wherein

the radio resource request is implemented by a protocol layer which defines procedures that enable radio resources to be allocated and divided among multiple users.

25. (New) A method according to claim 24, wherein said second radio resource request is sent in a message comprising a bit field of at least one bit long for identifying said second radio resource request as a radio resource request for packet-switched implementation of a real-time service.

26. (New) A method according to claim 24, wherein said protocol layer is a radio link control/medium access control layer.

27. (New) A method according to claim 24, wherein sending said first radio resource request comprises sending a packet channel request of a general packet radio service system, and sending said second radio resource request comprises sending a packet resource request of a general packet radio service system.

28. (New) A method according to claim 24, wherein said second radio resource request comprises a one bit long bit field, wherein:

a defined first value of said one bit long bit field indicates that radio resource is requested for packet-switched implementation of a real-time service; and

a defined second value of said one bit long bit field indicates that radio resource is requested for packet-switched implementation of a non-real-time service.

29. (New) A method for allocating radio resources in a packet-switched data transmission system, in which system a terminal is capable of communicating with a network over a radio interface by using packet transfer mode, wherein the method comprises:

receiving at the network a radio resource request sent by the terminal for allocating a radio resource to the terminal for packet-switched communication, wherein the radio resource request comprises an express indication that the radio resource is requested for a real-time service, wherein the method comprises:

allocating, by a network element, the requested radio resource for packet-switched implementation of a real-time service, and wherein

the radio resource request is implemented by a protocol layer which defines procedures that enable radio resources to be allocated and divided among multiple users.

30. (New) A method according to claim 29, wherein said radio resource allocation comprises:

establishing an open ended temporary block flow connection between the terminal and the network;

setting a radio link control mode of said temporary block flow connection as an unacknowledged mode.

31. (New) A method according to claim 29, wherein as an indication of the radio resource allocation the network sends to the terminal a packet uplink assignment message.

32. (New) A method according to claim 29, wherein said protocol layer is a radio link control/medium access control layer.

33. (New) A method according to claim 29, wherein the network allocates to the terminal the requested radio resource for the packet-switched implementation of the real-time service in response to receiving said radio resource request, the method being one-phased.

34. (New) A method for allocating radio resources in a packet-switched data transmission system in two phases, in which system a terminal is capable of communicating with a network over a radio interface by using packet transfer mode, wherein the method comprises:

receiving at the network a first radio resource request sent by the terminal for allocating radio resource for transmission of a second radio resource request;

allocating, by a network element, the requested radio resource to the terminal;

receiving subsequently at the network the second radio resource request sent by the terminal for allocating radio resource to the terminal for packet-switched communication, wherein

the second radio resource request comprises an express indication that radio resource is requested for a real-time service, and wherein

the radio resource request is implemented by a protocol layer which defines procedures that enable radio resources to be allocated and divided among multiple users, the method further comprising:

allocating, by a network element, the requested radio resource for packet-switched implementation of a real-time service.

35. (New) A terminal for communication, wherein

the terminal is configured for communication with a network over a radio interface by using packet transfer mode, the terminal comprising:

a processor for generating a radio resource request for allocating radio resource to the terminal for packet-switched communication;

a transmitter for sending the radio resource request from the terminal to the network;

a protocol layer for defining procedures that enable radio resources to be allocated and divided among multiple users, the protocol layer being configured to implement said radio resource request, wherein

the terminal is configured to include into the radio resource request an express indication on whether radio resource is requested for a real-time service.

36. (New) A terminal according to claim 35, wherein the terminal is configured to send said radio resource request in a message comprising a bit pattern for identifying said radio resource request as a radio resource request for packet-switched implementation of a real-time service.

37. (New) A terminal according to claim 35, wherein said protocol layer is a radio link control/medium access control layer.

38. (New) A terminal according to claim 35, wherein said radio resource request comprises a packet channel request of a general packet radio service system.

39. (New) A terminal according to claim 38, wherein said packet channel request is:

8 bits long and comprises a bit pattern 01101 for identifying the request as a radio resource request for packet-switched implementation of a real-time service; or

11 bits long and comprises a bit pattern 110101 for identifying the request as a radio resource request for packet-switched implementation of a real-time service.

40. (New) A terminal according to claim 35, wherein said terminal is one of the following: a mobile terminal of a cellular network or a computer terminal that is configured to communicate via a mobile terminal of a cellular network.

41. (New) A terminal according to claim 35, wherein the real-time service is selected from a group consisting of: transmission of speech, transmission of video image.

42. (New) A terminal for communication, wherein

the terminal is configured for communication with a network over a radio interface by using packet transfer mode, the terminal comprising:

a processor and transmitter for generating and sending from the terminal to the network a first radio resource request for allocating radio resource for transmission of a second radio resource request, wherein

the processor and transmitter are configured to generate and send from the terminal to the network, after the network allocates the requested radio resource, the second radio resource request for allocating radio resource to the terminal for packet-switched communication, wherein the terminal further comprises:

a protocol layer for defining procedures that enable radio resources to be allocated and divided among multiple users, the protocol layer being configured to implement said radio resource requests, wherein

the terminal is configured to include into the second radio resource request an express indication on whether radio resource is requested for a real-time service.

43. (New) A terminal according to claim 42, wherein the terminal is configured to send said second radio resource request in a message comprising a bit field of at least one bit long for identifying said second radio resource request as a radio resource request for packet-switched implementation of a real-time service.

44. (New) A terminal according to claim 42, wherein said protocol layer is a radio link control/medium access control layer.

45. (New) A terminal according to claim 42, wherein said first radio resource request comprises a packet channel request of a general packet radio service system, and said second radio resource request comprises a packet resource request of a general packet radio service system.

46. (New) A terminal according to claim 42, wherein said second radio resource request comprises a one bit long bit field, wherein:

a defined first value of said one bit long bit field indicates that radio resource is requested for packet-switched implementation of a real-time service; and

a defined second value of said one bit long bit field indicates that radio resource is requested for packet-switched implementation of a non-real-time service.

47. (New) A terminal according to claim 42, wherein said terminal is one of the following: a mobile terminal of a cellular network or a computer terminal that is configured to communicate via a mobile terminal of a cellular network.

48. (New) A terminal according to claim 42, wherein the real-time service is selected from a group consisting of: transmission of speech, transmission of video image.

49. (New) An apparatus for allocating radio resources in a packet-switched data transmission system, in which system a terminal is capable of communicating with a network over a radio interface by using packet transfer mode, wherein the apparatus comprises:

a receiver for receiving at the network a radio resource request sent by the terminal for allocating a radio resource to the terminal for packet-switched communication, wherein the radio resource request comprises an express indication that the radio resource is requested for a real-time service, wherein the apparatus further comprises:

a control unit for allocating the requested radio resource for packet-switched implementation of a real-time service, wherein

the radio resource request is implemented by a protocol layer which defines procedures that enable radio resources to be allocated and divided among multiple users.

50. (New) An apparatus according to claim 49, wherein said apparatus comprises said protocol layer and is configured to identify said radio resource request as a radio resource request for packet-switched implementation of a real-time service and to allocate the requested radio resource.

51. (New) An apparatus according to claim 50, wherein the allocation comprises:

establishing an open ended temporary block flow connection between the terminal and the network;

setting a radio link control mode of said temporary block flow connection as an unacknowledged mode.

52. (New) An apparatus according to claim 49, wherein the apparatus is configured to send to the terminal a packet uplink assignment message as an indication of the radio resource allocation.

54. (New) An apparatus for allocating radio resources in a packet-switched data transmission system in two phases, in which system a terminal is capable of communicating with a network over a radio interface by using packet transfer mode, wherein the apparatus comprises:

a receiver for receiving at the network a first radio resource request sent by the terminal for allocating radio resource for transmission of a second radio resource request;

a control unit for allocating the requested radio resource to the terminal, wherein

the apparatus is configured to subsequently receive at the network the second radio resource request sent by the terminal for allocating radio resource to the terminal for packet-switched communication, wherein the second radio resource request comprises an express indication that radio resource is requested for a real-time service, wherein

the apparatus is configured to allocate the requested radio resource for packet-switched implementation of a real-time service, wherein

the radio resource request is implemented by a protocol layer which defines procedures that enable radio resources to be allocated and divided among multiple users.

55. (New) An apparatus according to claim 54, wherein said apparatus comprises said protocol layer and is configured to identify said radio resource request as a radio resource request for packet-switched implementation of a real-time service and to allocate the requested radio resource.

56. (New) A method for allocating radio resources in a packet-switched data transmission system, in which system a terminal is capable of communicating with a network over a radio interface by using packet transfer mode, wherein the method comprises:

generating a radio resource request for allocating a radio resource to the terminal for packet-switched communication;

sending the radio resource request from the terminal to the network, wherein

the radio resource request comprises an express indication that the radio resource is requested for a real-time service, and wherein

the radio resource request is implemented by a protocol layer which defines procedures that enable radio resources to be allocated and divided among multiple users, the method further comprising:

receiving the radio resource request sent by the terminal at the network; and

allocating, by a network element, the requested radio resource for packet-switched implementation of a real-time service.